# Application No. Applicant(s) 09/710,551 KOHLI ET AL. Interview Summary Examiner Art Unit Yasin M. Bargadle 2153 All participants (applicant, applicant's representative, PTO personnel): (1) Yasin M. Bargadle. (2) Walter W. Duft. Date of Interview: 29 September 2005. Type: a) $\boxtimes$ Telephonic b) $\square$ Video Conference c) Personal [copy given to: 1) applicant 2) applicant's representative Exhibit shown or demonstration conducted: d) Yes If Yes, brief description: \_\_\_\_\_. Claim(s) discussed: 1 and 13. Identification of prior art discussed: \_\_\_\_\_. Agreement with respect to the claims $f(x) \boxtimes x$ was reached. $f(x) \boxtimes x$ was not reached. $f(x) \boxtimes x$ Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Examiner discussed with Applicant's attorney about limitaions in claim 1 and 13. Applicant's attorney agreed to add claim 13 in claim 1 and other independent claims. (A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.) THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE. OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

U.S. Patent and Trademark Office PTOL-413 (Rev. 04-03)

Examiner Note: You must sign this form unless it is an

Attachment to a signed Office action.

Examiner's signature, if required

#### **Summary of Record of Interview Requirements**

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

#### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by
  attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does
  not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
  - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

## Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

### CLAIM AMENDMENTS

Claim 1 (currently amended): A policy management system for managing network elements in a telecommunication network, comprising:

one or more policy proxies associated with said network elements; and
a central policy processing point in communication with said policy proxies;
wherein said policy proxies are configured to notify said policy processing point of
events occurring in said network;

wherein said policy processing point is run-time programmable with one or more policies to process said events and to notify one or more of said policy proxies of actions to be taken in response to said events;

wherein said policies are based on a policy definition language that defines (1) primitive events representing a single network element event, (2) basic events representing a group of primitive events occurring within a single time epoch, (3) complex events representing an accumulation of primitive events over plural time epochs, (4) internal events generated in response to network elements failing to take required actions, and (5) policy defined events generated by said policies according to policy defined event rules; and

wherein said policy proxies are configured to implement said actions at network elements they represent: and

further including a failover and upgrade system wherein:

an external monitoring script functions to restart said policy processing point and said policy proxies should such components become non-operational;

said policy processing point and said policy proxies are configured to enter a retry mode if communication with another component cannot be established, and if said retry mode is

unsuccessful, to consult a directory server to refresh location information relative to said component;

said policy proxies are configured to raise internal alarms if they are disconnected from, or cannot reach, an associated network element for a period of time;

an aggregator or said policy proxies maintain state on event registrations performed at each policy proxy;

said policy processing point monitors connection status with said aggregator, and following a disconnection therefrom, reloads its policies upon a reconnect; and said policy processing point stores its policies in said directory server.

Claim 2 (original): A system in accordance with claim 1 wherein said events are associated with event contexts and said policies are defined to produce actions in response to said events based on policy defined rules.

Claim 3 (cancelled).

Claim 4 (previously presented): A system in accordance with claim 1 wherein one or more of said policy proxies are respectively associated with only a single network element.

Claim 5 (original): A system in accordance with claim 1 wherein said policy proxies include an event filter.

Claim 6 (original): A system in accordance with claim 5 wherein said event filter is configured to

perform one or more of processing events into a device independent format, aggregating primitive events into basic or complex events, and raising internal events that reflect non-occurrence of expected events.

Claim 7 (original): A system in accordance with claim 1 wherein said policy proxies are configured to store event registration information identifying policies that have registered for selected events.

Claim 8 (original): A system in accordance with claim 1 wherein said policy processing point includes one or more of an event registration unit for registering events processed by said policy processing point with said policy proxies, an event distribution component for distributing event registration information to said policy proxies, an action/condition handler, and an action distribution component.

Claim 9 (original): A system in accordance with claim 1 further including one or more distributed policy processing points associated with said policy proxies and adapted to process local events received from said policy proxies.

Claim 10 (original): A system in accordance with claim 1 further including an aggregator for routing action commands from said policy processing point to said policy proxies.

Claim 11 (previously presented): A system in accordance with claim 10 wherein said policy proxies are identified in said policies using domain information, and said system includes a

monitoring events occurring at said network elements;

processing said events at a central policy processing point by applying said one or more policies;

said processing including applying policy rules to said events to determine actions to be taken in response to said events;

said policies being based on a policy definition language that defines (1) primitive events representing a single network element event, (2) basic events representing a group of primitive events occurring within a single time epoch, (3) complex events representing an accumulation of primitive events over plural time epochs, (4) internal events generated in response to network elements failing to take required actions, and (5) policy defined events generated by said policies according to policy defined event rules;—and

controlling one or more of said network elements according to said actions; and further including failover and upgrade steps wherein:

an external monitoring script functions to restart said policy processing point and said policy proxies should such components become non-operational;

said policy processing point and said policy proxies are configured to enter a retry mode if communication with another component cannot be established, and if said retry mode is unsuccessful, to consult a directory server to refresh location information relative to said component;

said policy proxies are configured to raise internal alarms if they are disconnected from, or cannot reach, an associated network element for a period of time;

an aggregator or said policy proxies maintain state on event registrations performed at each policy proxy;

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said policy processing point monitors connection status with said aggregator, and following a disconnection therefrom, reloads its policies upon a reconnect; and said policy processing point stores its policies in said directory server.

Claim 22 (original): A method in accordance with claim 21 wherein said events are associated with event contexts and said policies are programmed to produce actions in response to said events based on said policy rules.

Claim 23 (cancelled).

Claim 24 (original): A method in accordance with claim 21 further including one or more of aggregating primitive events into basic or complex events, generating internal events, registering events to associate them with said policies, and filtering events prior to processing them at said policy processing point.

Claim 25 (original): A method in accordance with claim 21 further including defining said network elements according to domain information in said policies and using domain resolution to determine which network elements to advise of said actions.

Claim 26 (original): A method in accordance with claim 25 wherein said domain information is centrally stored in a domain registry.

Claim 27 (currently amended): A computer program product for policy management of network

elements in a telecommunication network, comprising:

a data storage medium;

program means recorded on said data storage medium for configuring a policy execution space at runtime to run one or more policies;

program means recorded on said data storage medium for monitoring events occurring at said network elements;

program means recorded on said data storage medium for processing said events at a central policy processing point by applying said one or more policies, said processing including applying policy rules to said events to determine actions in response to said events;

said policies being based on a policy definition language that defines (1) primitive events representing a single network element event, (2) basic events representing a group of primitive events occurring within a single time epoch, (3) complex events representing an accumulation of primitive events over plural time epochs, (4) internal events generated in response to network elements failing to take required actions, and (5) policy defined events generated by said policies according to policy defined event rules;—and

program means recorded on said data storage medium for advising one or more of said network elements of said actions; and

further including means recorded on said data storage medium for providing a failover and upgrade system wherein:

an external monitoring script functions to restart said policy processing point and said policy proxies should such components become non-operational;

said policy processing point and said policy proxies are configured to enter a retry mode if communication with another component cannot be established, and if said retry mode is

unsuccessful, to consult a directory server to refresh location information relative to said component:

said policy proxies are configured to raise internal alarms if they are disconnected from, or cannot reach, an associated network element for a period of time;

an aggregator or said policy proxies maintain state on event registrations performed at each policy proxy;

said policy processing point monitors connection status with said aggregator, and following a disconnection therefrom, reloads its policies upon a reconnect; and said policy processing point stores its policies in said directory server.

Claim 28 (original): A product in accordance with claim 27 wherein said events are associated with event contexts and said policies are programmed to produce actions in response to said events based on said policy rules.

Claim 29 (cancelled).

Claim 30 (original): A product in accordance with claim 27 further including program means recorded on said data storage medium for aggregating primitive events into basic or complex events, generating internal events, performing one or more of registering events to associate them with said policies, and filtering events prior to processing them at said policy processing point.

Claim 31 (original): A product in accordance with claim 27 further including program means recorded on said data storage medium for using domain resolution to identify policy proxies defined by way of domain information in said policies.